

Product datasheet for RC224970

AKR1CL2 (AKR1E2) (NM_001040177) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AKR1CL2 (AKR1E2) (NM_001040177) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AKR1E2
Synonyms:	AKR1CL2; AKRDC1; htAKR; hTSP; HTSP1; LoopADR; TAKR
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC224970 representing NM_001040177 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGGAGATATCCAGCCGTGGGCCTCAGCTCCTGGAAGGCTTCTCCAGGGAAAGTGACCGAGGCAGTGA
AAGAGGCCATTGACGCAGGGTACCGGCACTTCGACTGTGCTTACTTTTACCACAATGAGAGGGAGGTTGG
AGCAGGGATCCGTTGCAAGATCAAGGAAGGCGCTGTAAGACGGGAGGATCTGTTCATTGCCACTAAGCTG
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GTTCAAGCCACTAACCAACCAGATTGAGTGCCACCCATATCTTACTCAGAAGAATCTGATCAGTTTTTGC
CAATCCAGAGATGTGTCGGTACTGCTTACCGTCTCTTGGTGGCTCGTGTGAGGGGTTGACCTGATAG
ACAACCTGTGATCAAGAGGATTGCAAAGGAGCACGGCAAGTCTCCTGCTCAGATTTTGTCCGATTTC
AATCCAGAGGAATGTGATAGTGATCCCCGATCTATCACCCCAAGTCACATTAAGAGAATATCCAGGTG
TTTGATTTTGAATTAACACAGCAGATATGGATAACATCCTCAGCCTAAACAGGAATCTCCGACTGGCCA
TGTTCCCCATAACTAAAAATCACAAGACTATCCTTTCCACATAGAATAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC224970 representing NM_001040177
 Red=Cloning site Green=Tags(s)

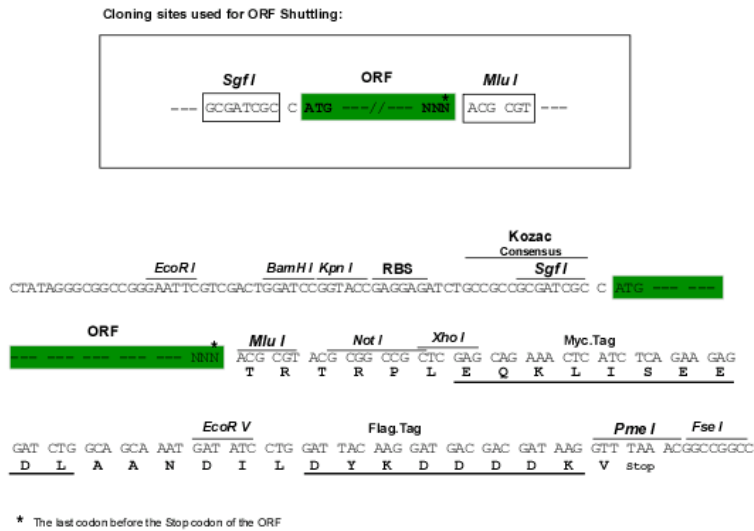
MGDIPAVGLSSWKASPGKVTEAVKEAIDAGYRHFDCAYFYHNEREVGAGIRCKIKEGAVRREDLFIATKL
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 VIPSDTDFLDTWEAMEDLVITGLVKNIGVSNFNHEQLERLLNKPGLRFKPLTNQIECHPYLTQKNLISFC
 QSRDVSVTAYRPLGGSCGVDLIDNPVIKRIAKEHGKSPAQILIRFQIQRNIVIPGSITPSHIKENIQV
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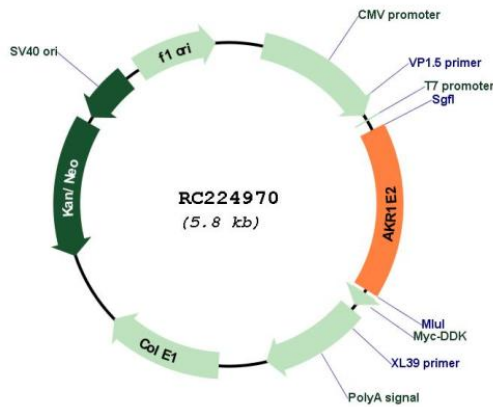
Chromatograms: https://cdn.origene.com/chromatograms/mk8044_g11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



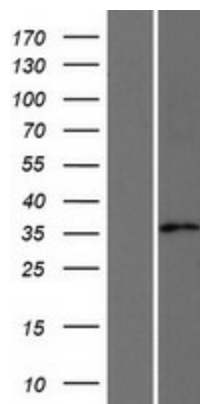
Plasmid Map:



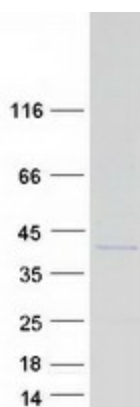
ACCN: NM_001040177

ORF Size:	960 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001040177.3
RefSeq Size:	1623 bp
RefSeq ORF:	963 bp
Locus ID:	83592
UniProt ID:	Q96JD6
Cytogenetics:	10p15.1
Protein Families:	Druggable Genome
MW:	36.4 kDa
Gene Summary:	The protein encoded by this gene is a member of the aldo-keto reductase superfamily. Members in this family are characterized by their structure (evolutionarily highly conserved TIM barrel) and function (NAD(P)H-dependent oxido-reduction of carbonyl groups). Transcripts of this gene have been reported in specimens of human testis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

Product images:



Western blot validation of overexpression lysate (Cat# [LY421713]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224970 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AKR1E2 protein (Cat# [TP324970]). The protein was produced from HEK293T cells transfected with AKR1E2 cDNA clone (Cat# RC224970) using MegaTran 2.0 (Cat# [TT210002]).